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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,500	08/25/2003	Michael Wolff	8224.401	2374
31740	7590	09/29/2004	EXAMINER	
THOMAS E. LOOP BARNARD, LOOP & MCCORMACK 947 POWELL AVENUE SW SUITE 105 RENTON, WA 98055			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/647,500	Applicant(s) WOLFF, MICHAEL	
	Examiner Chau N Nguyen	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-11,14-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-11,14-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. (5,309,539) in view of Hjortstam et al. (2004/0020681).

Sano et al. discloses a power cord (Figure 1b) comprising at least first, second and third wires (col. 3, lines 45-50) of substantially the same length, wherein at least one of the wires has a first flexible carbon material sheathing (6) (re claim 1).

Sano et al. does not specifically disclose each of the wires being terminated so as to define first and second ends of the power cord nor the at least first, second, and third wires being carbon conducting wires. Although not specifically disclosed by Sano et al., it would have been obvious to one skilled in the art to terminate each wire of Sano et al. to define first and second ends of the cord since

terminating ends of the wires in a cord to define first and second ends of the cord and to provide electrical connection to the cord is well-known in the art.

Hjortstam et al. discloses a power cable comprising carbon conducting wire (Figs 1-4). Hjortstam et al. discloses that carbon has high tensile strength, flexibility, and low conduction losses. It would have been obvious to one skilled in the art to use carbon conducting wire as taught by Hjortstam et al. for the wires of Sano et al. since carbon conducting wires have high tensile strength, flexibility, and low conduction losses.

Regarding the recitation of the "power cord adapted for the transmission of an alternating electrical current", it has been held that the recitation of an element being "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Regarding claims 2 and 3, the power cord of Sano et al. can be used for transmitting an alternating current of 50 or 60 Hertz since it comprises structure and material as claimed. Regarding claims 4 and 5, it would have been obvious to one skilled in the art to choose a suitable gauge for the wires of Sano et al. to meet the specific use of the resulting cord since it has been held that where the general conditions of a claim are disclosed in the prior art,

discovering the optimum or workable ranges involves only routine skill in the art.

In re Aller, 105 USPQ 233.

Sano et al. also discloses a second and third flexible carbon material sheathing for the second and third wires respectively (re claims 7 and 8) and the first flexible carbon material sheathing being made of a braided (woven) carbon fiber (col. 3, lines 15-24) (re claim 9). Re claims 10 and 11, it would have been obvious to one skilled in the art to modify the cord of Sano et al. by providing a vinyl tube between the wires and the carbon material sheathing (5) to further protect the wires since vinyl tube is well-known in the art for being used to protect cable wires.

3. Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Hjortstam et al. as applied to claim 1 above, and further in view of Paniri et al. (4,002,820).

The combination of Sano et al. and Hjortstam et al. discloses the invention substantially as claimed except for an outer flexible nylon sheathing. Paniri et al. discloses a power cord comprising an outer flexible nylon sheathing (38). It would have been obvious to one skilled in the art to provide an outer flexible nylon

sheathing taught by Paniri et al. in the power cord of Sano et al. to reinforce the cord.

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Hjortstam et al. as applied to claim 1 above, and further in view of Savoca et al. (4,911,652).

The combination of Sano et al. and Hjortstam et al. discloses the invention substantially as claimed except for a three-pin male connection plug at first end of the cord and a three-pin female connection plug at second end of the cord.

Savoca et al. discloses a power distribution system comprising a three-pin male connection plug connected to first end of a cord and a three-pin female connection plug connected to second end of the cord (Figs 4A&5A). It would have been obvious to one skilled in the art to use the three-pin male and female connection plugs taught by Savoca et al. in the cord of Sano et al. to provide electrical connection to the cord.

Response to Arguments

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Summary

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831